

REMARKS

Claims 1-22 remain pending in the present application. Clarifying amendments have been made to claims 1, 13 and 22 to more clearly recite the unique and novel features of the claimed invention. Accordingly, reconsideration and allowance for all of the claims in the present application as amended are earnestly solicited in view of the following remarks.

Claims 1-8 and 10-21 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,516,387 to Holicer and claims 9 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Holicer in view of German document No. 1947093 to Wahli. These rejections are respectfully traversed.

Claims 1, 13 and 22 of the present application have been amended to recite the unique and novel features of the through-holes for the claimed pressure relief valve. The through-holes are symmetrically arranged and evenly spaced about the circumference of the valve member. An example of this feature is illustrated in Figures 1 and 4A and disclosed on the paragraph bridging pages 4 and 5 of the present application. The claimed through-holes allow fluid to evenly dissipate through the valve member so that the proper alignment of the valve member is maintained as the valve member moves from the closed position to the open position. The through-holes permit fluid to flow through the valve member before an over pressure condition occurs and then reliably moves the valve member back into the proper alignment during normal operating conditions. As a result, dangerous over pressure conditions which threaten the integrity of the pressurized vessel are minimized and the claimed pressure relief valve facilitates reliable and repeatable operation by avoiding overpressure conditions of the pressurized vessel and resuming normal operating conditions.

Holicer is relied upon to disclose a valve apparatus for controlling and handling inflammable fluids. As illustrated in Fig. V, the valve apparatus of Holicer includes a body 1, a channel 16, a branch 53, a cross channel 53a, a valve head 54, perforations 55, a valve spring 58, a retaining plug 59, and an outlet 60. The perforations 55 have a very definite and calculated total area as related to the total area of the ports 11 in a thimble 8 (Figure III) of the excess flow check valve and the area of the passageway around the thimble 8. The perforations 55 are calculated, designed and built to discharge a smaller volume of fluid than is required to cause excess flow check valve 6 to close; and this is a matter of importance, in that this relief valve

may open and discharge a volume of fluid of predetermined quantity without causing the excess flow valve to close as disclosed at col. 6, lines 42-45. Holicer fails to suggest or imply the symmetrical arrangement of the through-holes about the circumference of the valve member as claimed in the present application. The perforations 55 in the valve head 54 of Holicer are calculated, designed and built to perform different functions than the through-holes of the claimed invention. Specifically, the perforations 55 of Holicer do not allow fluid to evenly dissipate through the valve member so that a proper alignment of the valve member is maintained as the valve member moves from the closed position to an open position as recited in claims 1, 13 and 22 of the present application. As a result, Holicer does not disclose a pressure relief valve for facilitating reliable and repeatable operation between closed and opened positions to avoid overpressure conditions as recited in the claims of the present application.

In the rejection to dependent claims 9 and 22, it is acknowledged that Holicer fails to suggest or imply an annular groove formed in the seal surface receiving an elastomeric seal ring and a base having a passage. Therefore, Wahli is relied upon to disclose a base and a valve enclosed by a cover 1. However, Wahli fails to cure the deficiencies of Holicer and it is respectfully submitted that claims 1-22 of the present application patentably define over Holicer and the combination of Holicer and Wahli. Accordingly, it is respectfully requested that these rejections be reconsidered and withdrawn.

In view of these amendments and for all of the above stated reasons, it is respectfully submitted that all of the outstanding rejections have been overcome. Therefore, it is requested that claims 1-22 of the present application be passed to issue.

If any issues remain unresolved, the Examiner is requested to telephone the undersigned attorney. Please charge any additional fees or credit any overpayments to deposit account No. 50-0896.

Respectfully submitted,

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